

EVM Meeting Agenda

- ***Opening Remarks (Dr. Lile)*** ***9:00 - 9:15***
- ***Study Update (Lile)*** ***9:15 - 9:45***
- ***Processing Issues (Led by McGahan)*** ***9:45 - 12:00***
 - ***Stakeholder Concerns***
 - ***Current Status***
 - ***Common Problems***
 - ***Comments and discussions feature***
 - ***File formats and size***
 - ***Single format***
- ***Lunch / EV Standards (DCMA - Amstutz)*** ***12:00 - 12:45***
- ***Resource and Business Issues (Metcalf)*** ***12:45 - 1:45***
 - ***Resource Tracking Reports***
 - ***Business Rules***
 - ***Common Format: Resources and Contracting Mechanism***
- ***Future Direction (Lile)*** ***1:45 - 2:00***
- ***Summary and Wrap-up (Lile)*** ***2:00 - 2:15***

Improving Acquisition Execution Situational Awareness: Central Repository Pilot

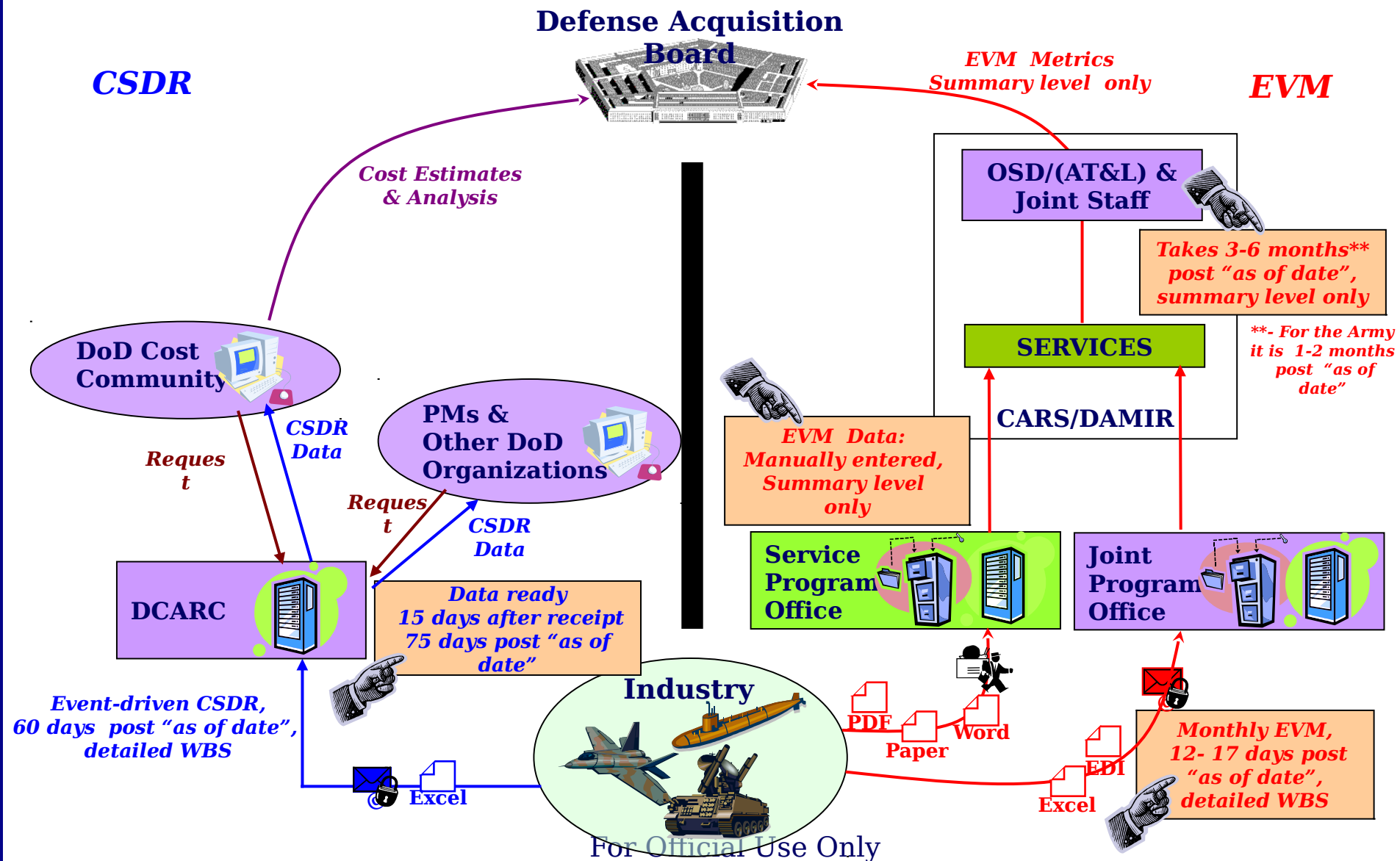


***Debbie Tomsic
(AT&L/ARA)***

***Ron Lile (Director,
DCARC)***

January 2007

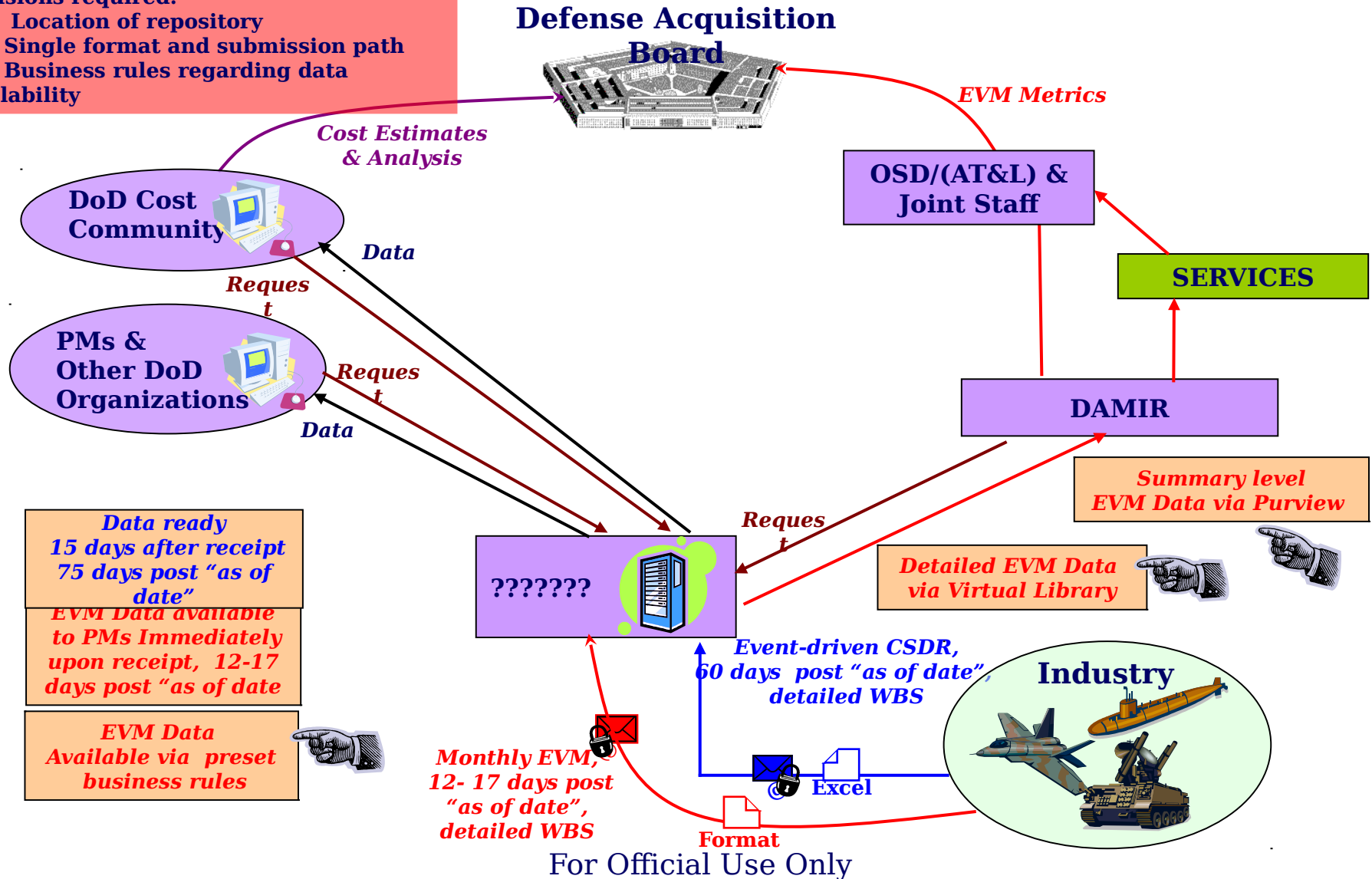
CSDR and EVM Reporting: Current Status



CSDR and EVM Reporting: Improved Model

Decisions required:

1. Location of repository
2. Single format and submission path
3. Business rules regarding data availability



Central Repository Pilot

- **Objective:**
 - **Demonstrate and evaluate the feasibility of implementing an automated Central Repository (CR) that provides for the centralized reporting, collection, and distribution for Key Acquisition Data, starting with Contract Performance Reports (CPRs).**
- **Develop and implement test policies and procedures to evaluate:**
 - **Complete, accurate, timely, and secure transfer of electronic data from the contractor to the CR.**
 - **Secure and controlled warehousing of data in the CR.**
 - **Controlled, timely, and secure access to data by authorized users.**
 - **Business rules that govern reporting, access, and availability of data.**
 - **Estimated workload impact and required resources to implement CR.**
- **Goal:**
 - **Develop a set of business rules for possible DoD-wide implementation that are supported by a consensus of the CR participants.**

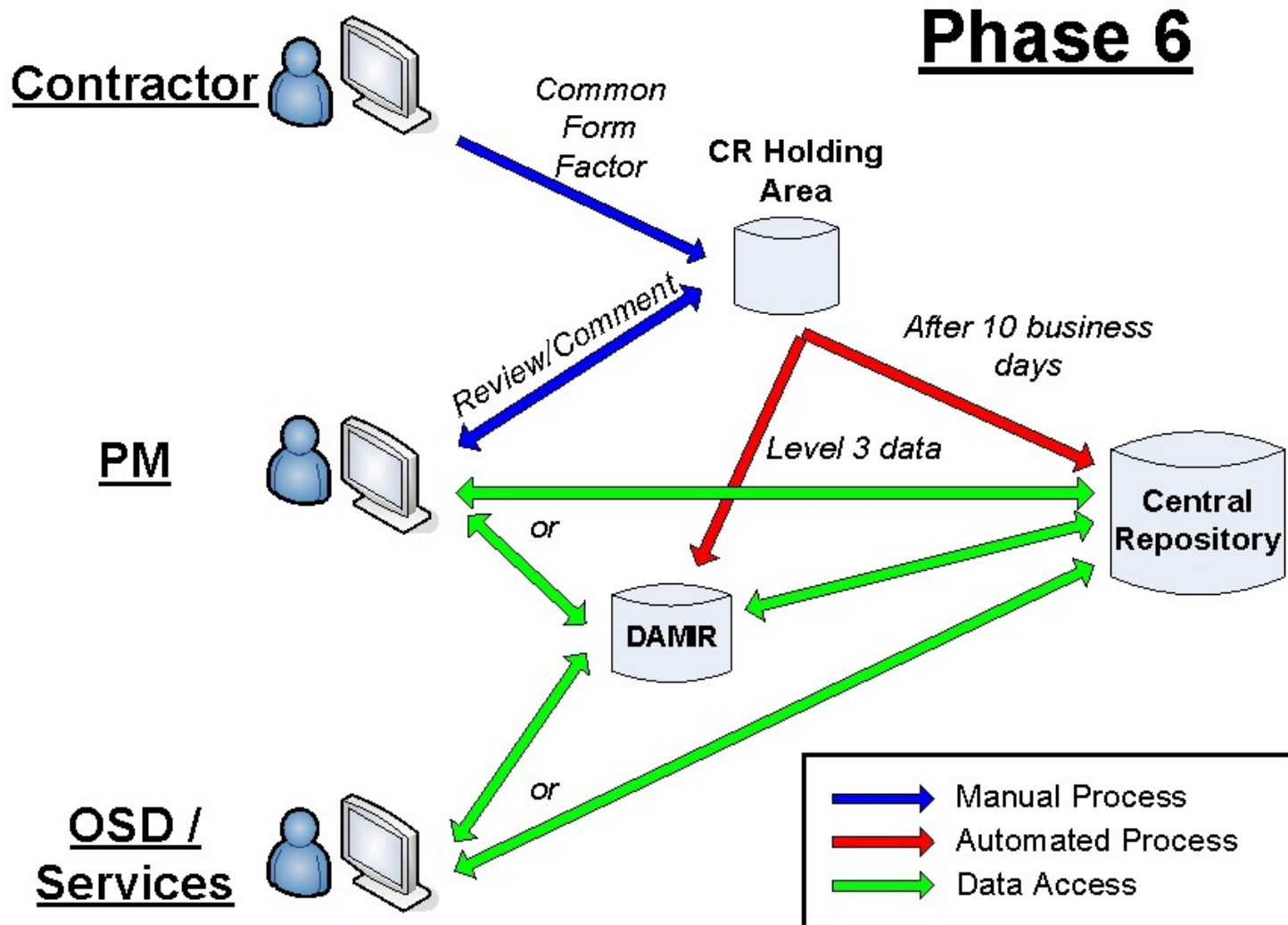
Repository Pilot Programs

| <u>Program</u> | <u>Service</u> | <u>Center</u> | <u>Contractor</u> | <u>DAES Group</u> |
|-----------------------|-----------------------|----------------------|--------------------------|--------------------------|
| C-17A* | Air Force | ASC | Boeing | A |
| Global Hawk | Air Force | ASC | Northrop Grumman | A |
| SBIRS HIGH | Air Force | SMC | Lockheed-Martin | A |
| ARH | Army | AMCOM | Bell | C |
| JLENS | Army | AMCOM | Raytheon | A |
| Land Warrior | Army | CECOM | General Dynamics | B |
| P-8 (MMA) | Navy | NAVAIR | Boeing | C |
| SM-6 | Navy | NAVSEA | Raytheon | A |
| MUOS | Navy | SPAWAR | Lockheed-Martin | B |

* -- Replaced JASSM, which was listed in the original memo

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Data Reporting and Access Process



* -- From "As-of Date", for contracts beginning after April 2005. Legacy contracts have up to 25 calendar days from "As-of Date".

Status

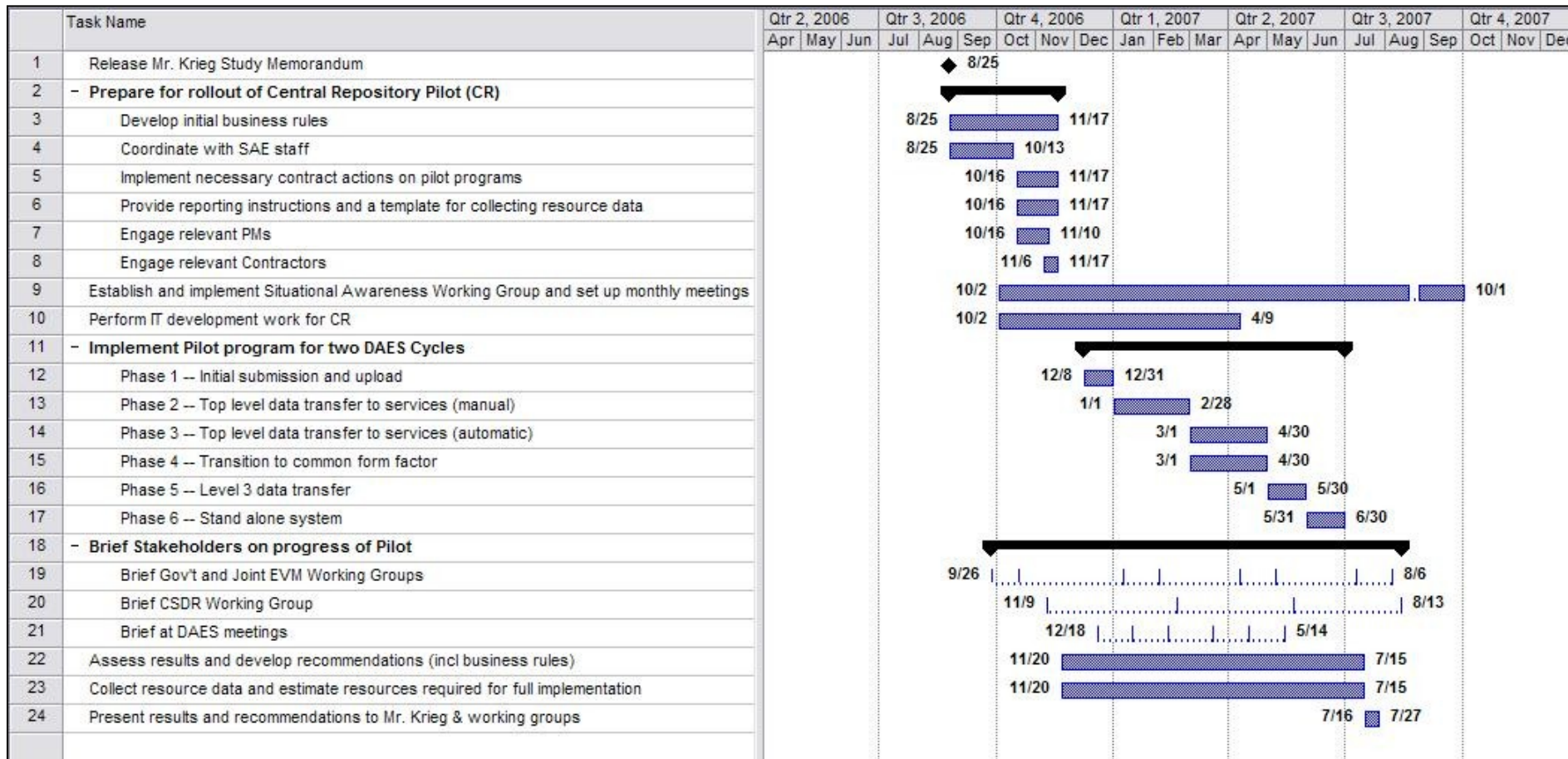
- ***Met with Program Office POCs on Nov 6th***
- ***Received confirmation that all contractors see CR submission as no-cost administrative change***
- ***Sent out registration instructions and Resource Tracking guide***
- ***Registered most of the anticipated users***
- ***Received submission of November data from 7 of 9 programs***
- ***Updated interface and administration of the EVM website***
- ***Began exploring a connection with DAMIR***

Programs Status

| <u>Service</u> | <u>Program</u> | <u>First Upload Due</u> | <u>Date Submitted</u> | <u>Users Registered / Requested</u> |
|----------------|---------------------|-------------------------|-----------------------|-------------------------------------|
| AF | C-17A | Dec 22nd | Dec 21st | 3 / 7 |
| AF | Global Hawk | Jan 1st | Jan 5th | 9 / 11 |
| AF | SBIRS HIGH | Dec 19th | Dec 19th | 10 / 11 |
| Army | ARH | Dec 31st | <u>NONE</u> | 2 / 3 |
| Army | JLENS | Dec 8th | Dec 12th | 4 / 4 |
| Army | Land Warrior | Dec 24th | Dec 21st | 4 / 4 |
| Navy | P-8 (MMA) | Dec 21st | <u>NONE</u> | 2 / 5 |
| Navy | SM-6 | Dec 13th | Dec 21st | 3 / 4 |
| Navy | MUOS | Dec 28th | Dec 22nd | 5 / 6 |
| Totals: | | | | 42 / 55 |

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Repository Pilot Schedule



Next Steps

- **Continue phase-in of Central Repository Pilot**
 - **Determine**
 - **Form factor for submittal**
 - **Business rules**
 - **Identify OSD and Service data flow requirements**
 - **Determine data access requirements (e.g., organizational, timing)**
 - **Resources necessary to proceed with later phases**
- **Identify other acquisition data candidates for inclusion in the repository**
- **Develop repository recommendations**
 - **Coordinate with:**
 - **CR Pilot Working Group**
 - **Situational Awareness Studies Working Group**
 - **Joint Government/Industry EVM Working Group**
 - **CSDR Focus Group**
 - **DAES Process Principals**
 - **Present to applicable groups**
- **Present findings and recommendations to SAEs and USD(AT&L)**

Defense Cost and Resource Center



EVM Central Repository Pilot Study

March 2007

John McGahan

Tecolote Research, Inc.





EVM Central Repository Pilot

- Objective:
 - Demonstrate and evaluate the feasibility of implementing an automated Central Repository (CR) that provides for the centralized reporting, collection, and distribution for Key Acquisition Data, starting with Contract Performance Reports (CPRs).
- Develop and implement test policies and procedures to evaluate:
 - Complete, accurate, timely, and secure transfer of electronic data from the contractor to the CR.
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 - Controlled, timely, and secure access to data by authorized users.
 - Business rules that govern reporting, access, and availability of data.
 - Estimated workload impact and required resources to implement CR.
- Goal:
 - Develop a set of business rules for possible DoD-wide implementation that are supported by a consensus of the CR participants.



What Does This Mean?

?



Big Picture Goals

- Moving to all ACAT 1D & 1C programs reporting to CR
 - Standard file formats and submission process
 - Submit to CR only (avoid dual submits to PM)
 - Track metrics on submit dates vs. expected
- Review and Publish
 - PM controls access during review period
 - Capture reviewer comments
 - On publish, push data to DAMIR (others).
 - Track metrics on review process

Big Picture Goals

- We need your support and feedback to:
 - define business processes that will make process work long term
 - implement software framework to support business functions
- Now is the time to define/refine the requirements before this becomes “real”



Agenda

- Submission Status
- Reviewer Status
- Software Update Demo (fielding Mar 8)
 - Updated Submission Process
 - Lead Reviewers Defining Submission Events
- Near Term To Do List
 - Standardization of submission process
 - Moving To Standard Formats
 - Include IMS and CFSR



Submission Status



EVM CR Status: Submissions

- Summary Submission Size Data
 - Average submission size: 2.5 meg
 - Largest: 50 meg
 - Submissions include between 1 - 9 files (75% of submissions less than 5 files)
- Common Problems/Issues
 - Submissions with wrong as-of date (and they get published)
 - Submission against prime contract rather than sub.
 - Submissions too big, or too many files
 - Initially we imposed 2 meg limit, max 5 files
 - Current limit is 20 meg, 5 files
 - Next release (Mar 8) changes process to allow unlimited number of files and size
 - Do we really want all this data?



EVM CR Status: Submissions

- C-17
 - RDT&E
 - 3 submission, 1 resubmit; avg 1.5 meg
 - Incorrect as-of date on 1 record
 - Procurement:
 - 1 submission (1/25), 0.3 meg
 - Wrong as-of date.
- Other Comments/Issues
 - PDF only. What other formats are available?
 - RDTE submissions include separate PDFs for 3010 funds and for 3600. Need to separate into tasks?



EVM CR Status: Submissions

- SM-6, RDT&E
 - 3 submission, 1 resubmit (not tagged)
 - Ranges between 2 meg and 6 meg
 - As of dates not consistent with what is entered
- Other Comments/Issues
 - PDF; one record included XML as well.
 - PDFs appear to be scanned images making them larger than needed.
 - One record included Fmt5 in Word rather than PDF
 - Including a transmittal letter... not needed?



EVM CR Status: Submissions

- JLENS
 - 3 submissions, 1 resubmit?, typical submission around 0.3meg
 - Not perfect on as-of dates (but pretty close)
- Other Comments/Issues
 - HTM format, around 0.3 meg; a Fmt5 around 0.6 meg
 - Other formats available?
 - 1 CFSR submission as Excel (37K, with links)



EVM CR Status: Submissions

- Land Warrior
 - 4 submissions, 1 file each, 1.5 to 2.0 meg
 - As of dates look ok
- Other Comments/Issues
 - ZIPs
 - includes PFD, Excel, TRN, Word
 - Some duplication of content
 - PDFs seem to be scans, causes them to be big.
 - Seems to include data on 3 separate tasks. Do these need to be separated?



EVM CR Status: Submissions

- SBIRS-High
 - 4 submissions, 1 or 2 files, 1.2 to 6.8 meg
 - As of dates pretty close.
- Other Comments/Issues
 - PDF (1meg), including signed cover page as scanned image.
 - XML (5 or 6 meg), but lots of placeholder future use rows; would be reasonable size if placeholder rows removed.
 - Not reporting for subcontracts?



EVM CR Status: Submissions

- MUOS
 - 4 submissions, 4 files each, 2.7 to 4.0 meg
 - As of dates not tracking to files
- Other Comments/Issues
 - Subcontract reports in Excel merged in to single ZIP file and submitted as part of prime submission (each Excel file around 0.5 meg).
 - 1.5 meg PDF including scanned image cover page, multiple formats, addendum, etc.
 - 0.5 meg XML



EVM CR Status: Submissions

- MMA
 - Reporting for prime and 2 subs
 - 9 submissions, between 1 and 12 files, 0.2 meg up to 1.2 meg
 - As of dates not consistent with submissions.
 - Need to submit subs against right contract/task.
- Other Comments/Issues
 - Most recent submission seems to have corrected many of the issues.
 - Fmt 1, 2 in HTML, about 0.1 meg
 - Subcontract reports being submitted again subcontract records; wrong as-of dates
 - Prime report Fmt 1, 2, HTML, wrong as-of dates
 - Some TRN files



EVM CR Status: Submissions

- RAH-70
 - 2 submissions, 1 or 2 files, avg 3 meg
 - As of dates look ok
- Other Domments/Issues
 - PDF only
 - All formats in same file.



EVM CR Status: Submissions

- RQ-4
 - Reporting on 5 tasks (RDT&E, LRIP 1, 2, 3, Production)
 - 6 submissions, 1 to 9 files, .05 meg to 50 meg
 - As of dates don't track
- Other Comments/Issues
 - The one 50 meg submission was broken into several parts. We need to dig thru to figure out what this is.
 - We need consistency in reporting, so if there are 5 tasks reporting, then we need the right submissions with each task.
 - Getting a bit more consistent with latest, but...
 - Excel and Word (total about 0.5 meg)
 - As-of dates off, Excel format non-standard



Review Status

Review Status

- What you told us you need
 - Review period before broader access by community
 - Ability to allow support contractors and weapons contractor to access
- What we need
 - More review (e.g., catch wrong as-of dates)
 - Increased utilization of comments; multiple reviewer comments before publish
 - At publish time, review and supplement data to publish to DAMIR... coming soon.
 - At publish time, provide summary quality comment.

Software Update



Near Term To-Do List



Standard Submission Process

- Changing software to make the identification of file type more clear (e.g., Format 1, 2, etc vs. CPR)
- For each contract (task) submitting, we need a single file for each format.
 - Tagged by type
 - Single format (e.g., TRN, XML, maybe Excel)
 - Supporting documents tagged “Other”; maybe zipped.
- Double check contract numbers, subcontract numbers, tasks, and submission events



Standard Formats

- TRN
 - Used by wInsight; the EDI X12 for CPR
 - Small memory footprint
- XML
 - Current formats for some programs appears to be wInsight generated. Would prefer the TRN format if from wInsight.
 - We're looking at supporting the DCAA/UNCFACCT emerging standard
- Standard Template in Excel?
 - Not like what we're seeing today!
 - No "links", not designed for "printing"
- Bottom line: We need to capture the data; not a printed form.



Other Submission Components

- IMS
- CFSR
- What exactly do you have?
- This Month
 - Send what you have
 - Gradual transition to standardization?



International Data Standards Update Introduction to EVGen3 (Third Generation Earned Value)

Presented By:

Peter Amstutz

**DCMA Information Technology
Technical Requirements and Design
Division**

March, 2007

09/11/16

Executive Overview

DCMA and Earned Value

- DCMA is a customer of nearly every cost / schedule management product in use
- DoD's supplier base is the target market for all cost / schedule software companies
- DCMA uses client or web-based software from Primavera, Deltek , Business Engines, Artemis, Dekker, and Microsoft in order to read data files from various defense contractors.

The Problem

- Current means and methods to share cost and schedule data are cumbersome, limiting, and hard to implement
- Tend to “reinvent the wheel” for each project
- Do things to ourselves to make it hard
 - Contract requirements are inconsistent
 - Manually collecting data from many different systems to create a report
 - Use formats that are useless in a digital environment – fax, scanned documents, PDF files

The Solution

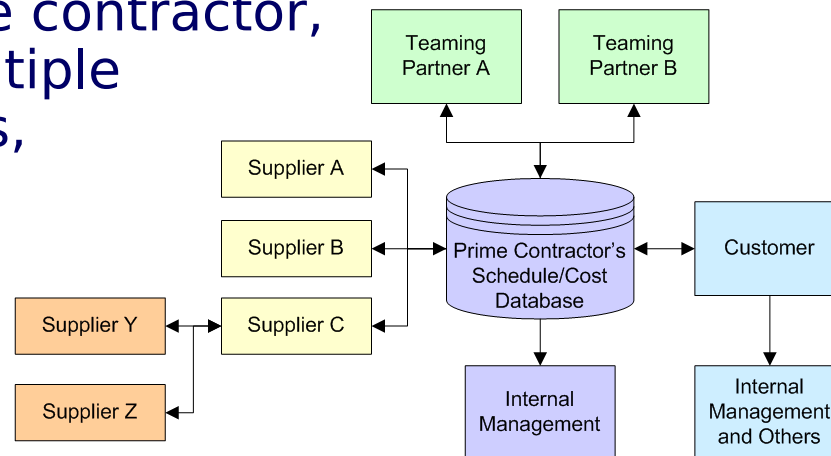
- Standardize data formats and methodology
 - Gain international acceptance
 - Gain tool vendor acceptance
- Utilize state-of-the-art IT technology for data communication
 - Interoperable web services
 - Secure file transfer protocol
- Reuse all of the above to:
 - Streamline project management data reporting
 - Eliminate custom peer-to-peer integration efforts

What is EVGen3?

- Earned Value: Third Generation
 - **Generation 1**
 - Paper-based Cost & Schedule reporting
 - **Generation 2**
 - EDI Transactions (839 & 806) for Cost & Schedule reporting
 - **Generation 3**
 - What we're building
 - XML-based document exchange for Cost & Schedule reporting

EVGen3 Objectives

- Eliminate disparate formats and media
- Create a library of formal, published XML schemas (data components) that can be used by the project management community
- Facilitate data exchange for all parties
 - Customer, prime contractor, teammates, multiple tiers of suppliers, internal management



- U.S. Government Involvement with UN/CEFACT (United Nations Committee for the Facilitation of Electronic Trade and Commerce)
 - UN/CEFACT candidate project proposed Sept 2005
 - DCMA is primary sponsor for this project
 - First pilot implementation completed March 2006
 - Prime and DCMA exchanged UN/CEFACT data
 - wInsight XML data transformed to UN/CEFACT standard
 - Currently in Implementation Verification Stage
 - Required for adoption of standard
 - EVGen3 system exported to trading partners
 - Focus on validation of standards and ease of implementation

- Cost & Schedule Data Model (eg, XML Schema)
 - Currently in draft form
 - UN/CEFACT release candidate anticipated in March 2007
- Three Implementation Verifications Required
- Purpose of verification
 - Prove usability of data standards
 - Prove usability of data exchange methodology

Software Vendors

- Industry consortium actively involved with Earned Value and Project Management software vendors
 - Deltek
 - Formerly Welcom
 - Formerly C/S Solutions (wInsight)
 - Artemis
 - Dekker
 - Business Engine MPM
 - Primavera
- Incorporation of UN/CEFACT standard by major vendors for importing/exporting data
 - Eliminate need for custom data transformation by users

The Bottom Line

- Why should vendors to the Gov't participate in EVGen3?
 - Jump-start streamlining of project management data reporting
 - Reuse project management data and supply chain solutions to eliminate custom development to work with each trading partner
- How is this possible?
 - UN/CEFACT process will create a standardized library of data specifications and a standard methodology for data exchange
 - Current web services technology provides tools for achieving supply chain automation through standardized, aggregated data transfer

Our Current Status

- What is our current status?
 - Initial Draft schemas produced
<http://www.dcma.mil/xsd>
 - Schemas 100% harmonized, schemas to be generated and adopted as official draft
 - Three implementation verifications required for draft to be voted upon by UNECE for adoption.
 - Current estimate is March, 2007 for completion

Next Steps

- Marketing standards to industry
- Work with software vendors to incorporate
- Pilots with industry for familiarization
- Policy letter or policy guidance letter
- Implementation verifications

Getting Started

How do I participate?

- Assemble project team
 - Project Lead
 - EV Business Expert(s)
 - IT Web Services Expert(s)
- Meet with DCMA for Project Inception
- Conduct Implementation Verification
 - Verify UN/CEFACT Data Model
 - Perform Connectivity Test
 - Perform EVGen3 Data Transfer Test

How do I participate?

Bring your project team “to the table”

- **Business domain experts who collect and use EV cost and schedule data**
- **Visionaries who want to improve EV data collecting and distributing**
- **IT experts who know how to put automation into production**

DCMA and industry partners have arranged two tiers of participating groups—a business coordination group, and an IT technical group

How do I participate?

Become a part of the EVGen3 Implementation Verification process

- **Work with EV data according to the UN/CEFACT standard specifications**
- **Establish baseline web service connectivity with DCMA and your other trading partners**
- **Automate the transfer of UN/CEFACT EV data according to the EVGen3 Web Service specification**

***DCMA provides a toolkit to simplify
all of the above***

A set of tools, specifications, and examples to speed the adoption of Web Services Technologies

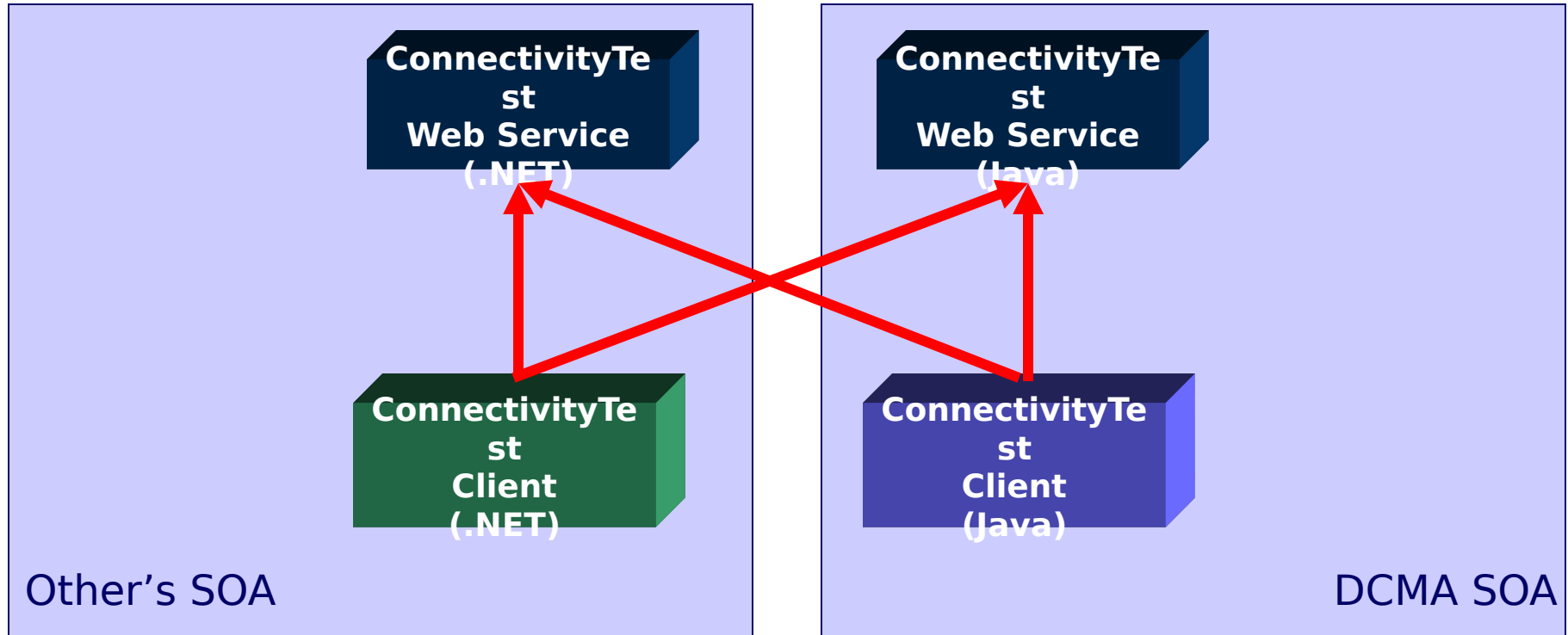
Contents:

- ConnectivityTest
 - Secure Web Service connectivity testing
 - Http, https, https w/credential
 - Available for Java or .NET
- EVGen3 Web Service Specification
 - WSDLs, XML Schemas
- EVGen3 Ref. Implementation
 - End-to-end EV supply chain automation prototype
 - Secure EV File Transfer
 - Source code available (Java only)

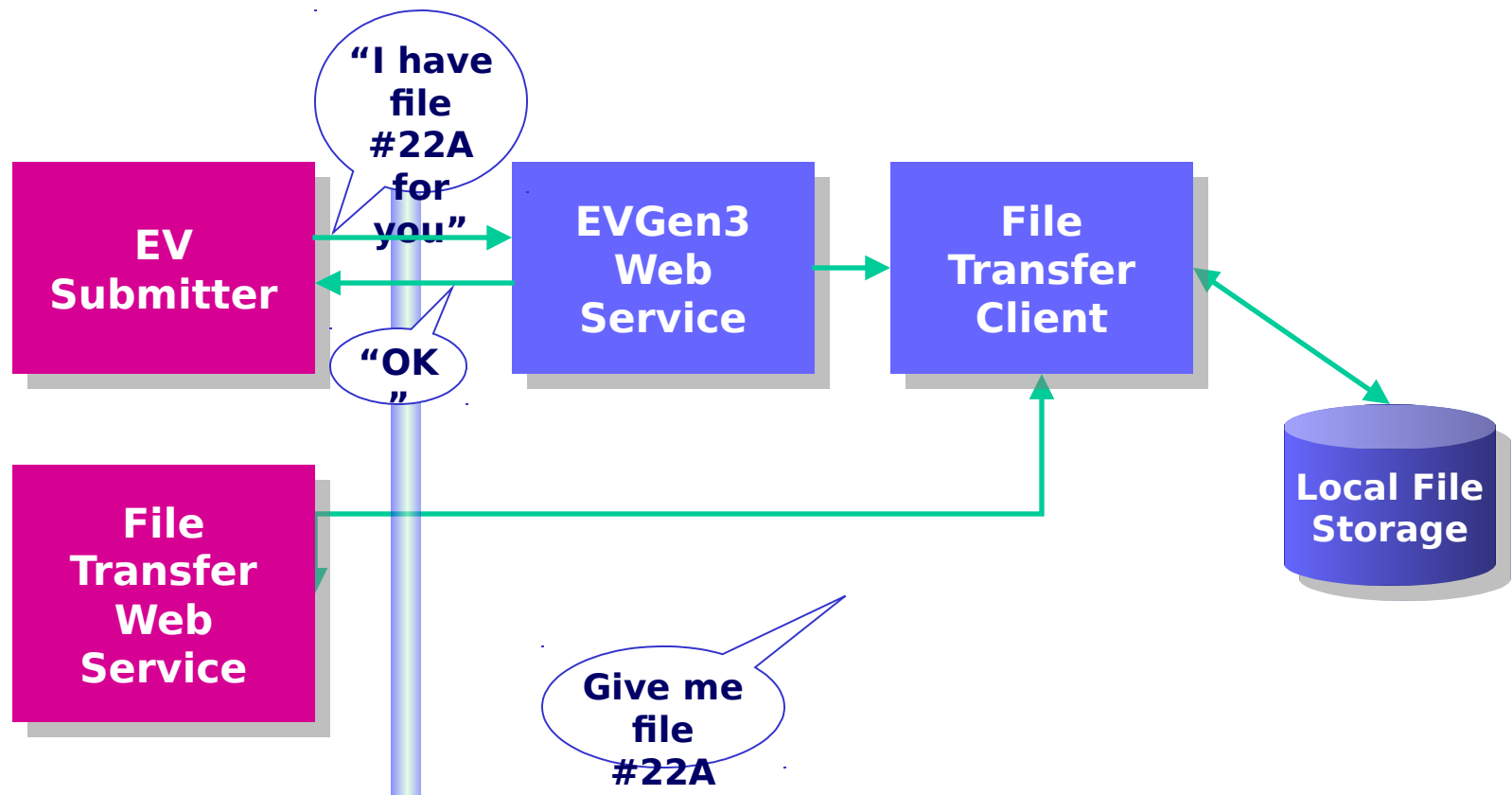


Technical Overview

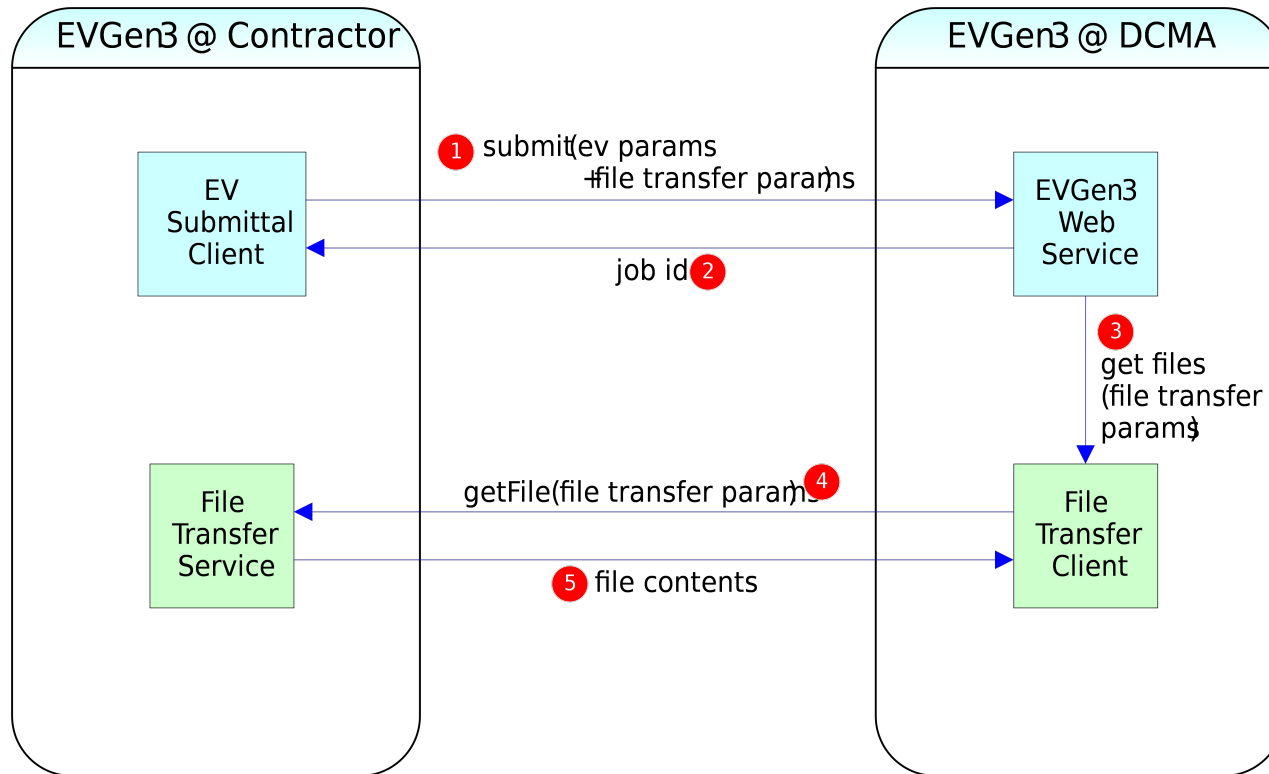
The Connectivity Test Web Service and Client are interoperable with both Java and .NET



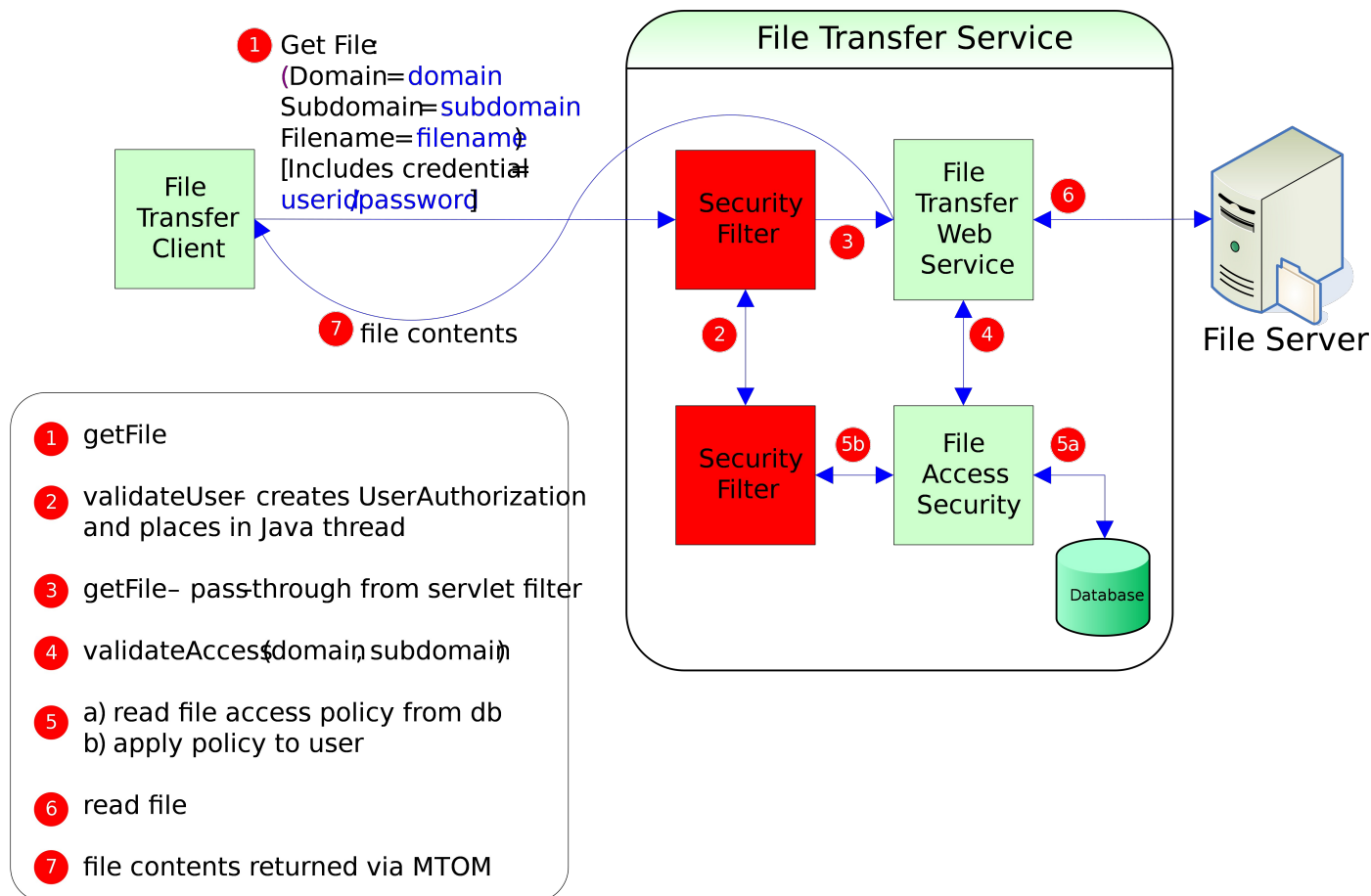
EV Data Transfer Process



EVGen3 Web Service



EVGen3 Secure File Transfer



Contacts and Info

- U.S. Gov't Sponsor
 - Peter Amstutz
email: peter.amstutz@dcma.mil
- EVGen3 Project Lead
 - Scott Larson
email: scott.larson.ctr@dcma.mil
- EVGen3 Technical Lead
 - Michael Frank
email: michael.frank.ctr@dcma.mil
- EVGen3 Data Model Lead
 - Chris Hassler
email: chris.hassler.ctr@dcma.mil

- EVGen3 Project Wiki
 - <https://evg3.dcma.mil>
- Draft UN/CEFACT Data Model (XML Schemas)
 - <http://www.dcma.mil/xsd>
- UN/CEFACT Organization
 - <http://www.unece.org/cefact>
- U.S. Government Registries
 - <http://www.xml.gov/et/evm.xml>
 - <http://www.core.gov>
 - <http://et.gov>

Resource Tracking, Business Rules, and Common Format Discussions

Michael Metcalf, IDA



Resource Tracking -- Overview

- ***We are tracking resources required for EVM Pilot over and above normal operations***
 - ***Labor and other expenses***
 - ***Part of business case at conclusion of Pilot study***
- ***Received from 7 of 9 programs through January (missing JLENS and Global Hawk)***
- ***5 of 7 filled out as intended***
- ***Received 1 of 9 for February (Land Warrior)***

Resource Tracking -- Expectations

- ***Send to M Metcalf 5-7 business days after each CPR submittal***
- ***Include hours and expenses from both Program Office and Contractor(s)***
- ***Include any other pertinent information***

Example

Resource Tracking -- Stats

- ***Registration & Certificates***
 - ***Avg 1.3 hrs/program, 2.5 hrs/contractor***
 - ***High 7.0 hrs, Low 0.5 hrs***
- ***December Uploads***
 - ***Avg 1.75 hrs/program, 1.3 hr/contractor***
 - ***High 7.0 hrs, Low 0.4 hrs***
- ***January Uploads***
 - ***Avg 2.5 hrs/program, 1.8 hr/contractor***
 - ***High 7.5 hrs, Low 0.4 hrs***












Business Rules - [Nov 2006]

- ***Requirement:***
 - ***Determine Business rules that govern reporting, access, and availability of data***
- ***Questions to be answered:***
 - ***Who are the authorized users & reviewers?***
 - ***When do the authorized users get access to the data?***
 - ***What are the needed data transfers to DAMIR and the Services?***

Business Rules - Today

- ***Requirement:***
 - ***Determine Business rules that govern reporting, access, and availability of data***
- ***Questions to be answered:***
 - ***Who are the authorized users & reviewers?***
 - ***[Users - TBD; Lead reviewer decides reviewers]***
 - ***When do the authorized users get access to the data?***
 - ***[10 business days - Do we need to revisit?]***
 - ***What are the needed data transfers to DAMIR and the Services?***
 - ***[In Process]***

Draft Pilot Business Rules [Nov 2006]

| | Upload | Immediate Access in Holding Area | After 5 Days (in Holding Area) | After 10 days (in Central Repository) |
|-----------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <i>Contractor</i> |  |  | | |
| <i>PM Office</i> | |  | |  |
| <i>PM Support Cntr</i> | |  * | | |
| <i>PEOs and SAEs</i> | | |  |  |
| <i>DCMA/Oversight</i> | | |  |  |
| <i>OSD/AT&L</i> | | | |  ** |
| <i>Other Gov't Analysts</i> | | | |  |



= Own program(s)/Contracts



= All programs

* -- As approved by PM and Contractor (data provider)

** -- This is also when DAMIR will automatically pull CPR data through WBS Level 3 (Level 4 for space programs)

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Draft Pilot Business Rules

[Today]

| | Upload | Immediate Access in Holding Area | Managerial Oversight Reviewers | After 10 days (in Central Repository) |
|----------------------|--------|----------------------------------|--------------------------------|---------------------------------------|
| Contractor | ✗ | ✗ | | |
| PM Office | | ✗ | | ✗ |
| PM Support Cntr | | ✗* | | |
| PEOs and SAEs | | | ✗ | ✗ |
| DCMA/Oversight | | | ✗ | ✗ |
| OSD/AT&L | | | | ✗** |
| Other Gov't Analysts | | | | ✗ |



= Own program(s)/Contracts



= All programs

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** -- This is also when DAMIR will automatically pull CPR data through WBS Level 3 (Level 4 for space programs)

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Business Rules - Outstanding Issues

- ***Who are authorized users?***
- ***When do authorized users get access to the data?***
- ***How do we handle data errors found after a document has been published?***
- ***Should cover memos be required part of submittals?***

Others?

Common Form Factor - Outstanding Issues

- ***What is/are the common form factor(s)?***
- ***What needs to be done to implement a common form factor in the EVM Pilot?***
 - ***File size issues***
 - ***Use of a standard schema***
 - ***Proper set-up of contracts/subcontracts***
- ***What needs to be done to get the single form factor submittal on contracts?***
- ***What are the cost implications?***

Others?

Other Issues?

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- ***Summary and Wrap-up (Lile)*** ***2:00 - 2:15***

Future Direction

Dr. Ron Lile, DCARC



EVM Repository Schedule

